

## Precalc Warm Up # 13-5

A boat is driving 40 mph north and encounters a current from the SE going 12 mph. What is the resulting speed and direction of the boat.

## Vector Review WS

1.  $x = 6$   $y = -5$

2.  $\frac{9}{\sqrt{145}}(6i - 10j + 3k)$

3.  $\vec{AB} = \begin{pmatrix} 11 \\ -3 \end{pmatrix}$   $|\vec{AB}| = \sqrt{130}$

4.  $\theta = 45^\circ$

5.  $4BC$

6. a)  $\vec{s} + 3\vec{p}$  b)  $2\vec{p} + \vec{s}$   
c)  $2\vec{p} - \frac{1}{2}\vec{s}$

7.  $\theta \approx 66.7^\circ T$   
 $d \approx 460.2$  miles

8.  $\approx 85.4$   
Newtons

$\theta \approx 122.6^\circ T$

## HW: Final Exam Review worksheet

Final Exam covers:

PC 3.7, 3.8	{	<u>Topics</u>
PC 4, 5, 6		Partial Fraction Decomposition
SL 7, 9, 12		Rational Functions
		Exponents and Logarithms
		Trigonometry
		Vectors

Vector Quiz Monday  
Last HW Check Tuesday